Recd 2/14/06

RISK SCIENCES

Recommended Revisions to Proposed Nutrient TMDL for Big Bear Lake

1) Revise language of staff report to indicate that external load dischargers are responsible for "some" of the internal load. Change text from saying that they are responsible for reducing "the" internal loads to "they are responsible for reducing their internal loads."

2) Delete the example calculation of natural background loads. Without an agreed definition as to what constitutes "natural background," such calculations are premature. The example significantly underestimates the natural background loads.

3) Change target for Percent Aquatic Macrophyte Coverage to range between 10-30% of the littoral zone as recommended in the revised Leidy report.

4) Delete the compliance date for wet or average conditions. A compliance date cannot be approved until a TMDL and Implementation Plan are available to know what is required to comply.

5) WARM and COLD are "designated" uses not "existing" uses. Existing uses are those that have been attained since November of 1975. The definition of attainment is that water quality standards have been consistently met. Water quality objectives cannot be revised to be less stringent if these are "existing" uses.

6) Modify statement that reducing nitrogen and phosphorous is "necessary" to meet narrative water quality standards for algae, weeds and dissolved oxygen. There are lake management strategies to improve some or all of the response targets without necessarily reducing nitrogen and/or phosphorous concentrations. Regional Board cannot specify the method of achieving compliance.

7) Margin of safety for nutrient targets is unnecessary given the degree to which the response targets are being attained by other control measures.

8) Chlorophyll-a target is expressed as an annual growing season average. Using 14 ppm will result in non-compliance in half the years despite the fact that algae is not impairing beneficial uses in those years.

9) Targets should be adjusted for falling lake levels. Evaporation increases nutrient concentrations by up to 100% during a drought cycle.

10) There is a strong possibility that EPA will line item veto the "Weight-of-Evidence" approach based on their long-standing commitment to the "Independent Applicability" approach. If they do so, the entire basin plan must be brought back to the Regional Board for reconsideration.

11) Dry condition compliance depends on control over external loading during wet weather.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San F

OPTIONAL FORM 99 (7-90)

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To Joanne Schneider or Hope Smythe	From Dave Smi
Dept./Agency	Phone #
Fax #	Fax #

NSN 7540-01-317-7368 5099-101 GENERAL SERVICES ADMINISTR

February 23, 2006

Joanne Schneider
Environmental Program Manager
California Regional Water Quality Control Board, Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501

Dear Joanne,

Thank you for the opportunity to provide additional comments on the Big Bear Lake nutrient TMDLs. As we discussed during our February 16, 2006 call, two aspects of the TMDLs need to be addressed in order to ensure the TMDLs are approvable under the Clean Water Act. This letter discusses those concerns and outlines potential options for addressing them.

The staff report suggests the TMDLs and associated allocations may not result in attainment of the selected total nitrogen target. As the numeric target is the State's interpretation of the applicable water quality standards (WQS) and all TMDLs must be set at levels sufficient to meet WQSs, the TMDLs must be set at levels that are expected to result in attainment of selected numeric targets. To address this concern, several options are available: (a) provide a supplemental technical rationale to support a finding that the TMDL will meet the TN target; (b) withdraw the total nitrogen (TN) target, particularly if it is not vital to WQS interpretation for Big Bear Lake; (c) revise the TMDLs and/or allocations to demonstrate that TN target can be met; and/or (d) provide a larger explicit margin of safety (MOS) (i.e. lower allocated loadings) to account for this significant uncertainty.

Although we concur with the TMDL's focus on dry hydrological conditions and effects as the highest priority time period in terms of nutrient effects in the Lake, we are concerned that the staff report does not demonstrate that setting TMDLs and associated allocations that apply only during dry hydrological conditions will ensure WQSs are attained during all hydrological/climatic conditions. TMDLs must be set at levels that result in attainment of water quality standards during all hydrological/climatic conditions. Based on your source assessment, it appears substantial external nutrient loadings occur during wet conditions. A significant portion of wet condition nutrient loads are likely to remain in the Lake for an extended period of time, thus contributing to in-lake nutrient loading during dry conditions. We recommend the following options to address this

concern: (a) provide a supplemental technical rationale to support a finding that the proposed TMDLs are likely to result in WQS attainment under all hydrological and climatic conditions without requiring pollutant input reductions during non-dry hydrological conditions; (b) provide some level of wet hydrological condition nutrient input reductions; and/or (c) provide a larger explicit MOS to account for this uncertainty.

We hope this clarifies the concerns we have with the current Basin Plan Amendment and supporting analysis. If you have any questions, please call Cindy Lin at (213) 244-1803 or me at (415) 972-3416.

Sincerely yours,

David Smith

cc: Ken Harris, SWRCB